# THE MILITARY SURGEON

Vol. 97

DECEMBER, 1945

No. 6

### ORIGINAL ARTICLES

Authors alone are responsible for opinions expressed in their contributions

### 204TH GENERAL HOSPITAL ON GUAM

By THE PUBLIC RELATIONS OFFICER

(With five illustrations)

THE 204th General Hospital, the first major hospital unit to leave the United States for duty in the Pacific, completed three years of overseas service in March of this year and went on to climax its long tour of duty by receiving 11,720 casualties from Okinawa battlefields.

Not to be outdone by combat troops going overseas early in the war, the 204th came to the Hawaiian Islands in March, 1942 and served there for 34 months.

As the first General Hospital to leave the Hawaiian Islands for a forward area, the 204th arrived at Guam on January 2 this year and by the 8th day of the month had set up a 1000-bed hospital in tents and was receiving local patients, until commencement of the Iwo Jima campaign in February, as a result of which it cared for 5076 Marine casualties.

Navy Sea-Bees started clearing the present area January 1, this year. From Guam's dense jungle the site was claimed. By May 1, the 204th had its new home and ward doors opened to receive the mounting number of Okinawa casualties.

The large hospital unit had administrative or physical responsibility for 13,303 Army casualties from the Okinawa campaign. The 204th is a 2000-bed unit.

Four times the General Hospital has been set up overseas. Activated at Ft. Bliss, Tex., on February 10, 1941, the unit came over-

seas in March, 1942. It was set up twice in the Hawaiian Islands and then upon coming to Guam operated in its tent area for four months. The hospital occupied its pre-fabs on May 1.

Largest number of battle casualties to be received in one day by the General Hospital was 648 Marines from the Iwo Jima campaign on February 28. In another 24-hour period the 204th discharged 340 patients.

Colonel Tracy L. Bryant of Syracuse, N.Y., formerly a practicing surgeon in that city is commanding officer of the 204th General Hospital.

The executive officer is Lt. Col. J. Claude Proffitt, who had a private practice at Seattle, Washington before entering the Army.

### Its Founding . . . Early Days Installations and Sanitation

A former cocoanut grove on Guam is the site of the 204th General Hospital.

When the unit was originally set up at this Marianas Island, all the wards and installations were housed under canvas except the surgical unit, laboratory and X-ray rooms. These were frame buildings with wooden floors. Sea-Bees cleared away a very dense jungle area and tents were pitched on a ridge to accommodate satisfactory drainage. While these operations were carried on, maurauding Japs were present in the adjacent jungle area.

The surgical building was 54 x 18 feet. A sterilization room and unit was partitioned off inside the building. Coral floors, six inches in depth were laid in ward and personnel tents. Only wooden floored-tents were those occupied by nurses. A camouflaged screen eight feet high was placed around the nurses quarters. Army field telephones connected the sections of the hospital.

The patient's mess was set up in the center of the ward area. The messes were equipped with field ranges and hot water heaters.

Water for the tented hospital came from a 7500-gallon tank situated at a high point of the area. The water was trucked to the tank by Army engineer tank trucks. Pipelines were laid into important installations. Water waste was disposed by soakage pits filled with absorbent coral rock. Sewage was accommodated by deep-pit latrines. These were sprayed twice a week with the Army's DDT insecticide.

Lighting power for the tent area was supplied by five 30-kilowatt generators that supplied the necessary electricity. "Every tent and building, and the perimeter area was sufficiently lighted," said Captain Frank E. Fulmer, sanitary engineer for the hospital from Mishawaka, Indiana. The perimeter of the tent area was approximately two miles and guards were dispersed along the line for purpose of protection.

Roadways through the tent area were built of coral rock and sprinkled to avoid dust. Ditches along the roads served as drainage.

One month's work was necessary to clear the entire area. Besides the hospital unit proper, a motor pool, utilities section, athletic field and movie area were set up. A storage area, 600 x 300 feet was set off along one side of the tented hospital area.

On January 1, 1945, Sea-Bees began clearing an adjacent area for the permanent hospital buildings. Four months later the area held the present hospital installations and patients, casualties from the Okinawa campaign, filled the wards.

The Navy construction outfit's heavy equipment ruled the terrace with the exception of outer grounds where topography dictated construction jobs. Pre-fab wards went up as fast as the bulldozers prepared the ground. The area to the rear of the hospital was occupied by the detachment headquarters, supply and utilities sections. The plan for the 2,000 bed hospital unit was made by its staff.

A road runs at the rear of every ward. This minimized fire hazards, helped entry of supplies and removal of garbage.

The War Department's plan for a 2000-bed hospital was followed in the construction of the wards. A typical ward section, of which there are 34 units in the 204th, was comprised of two pre-fab buildings, 120 x 20 feet in size. A utility unit, 48 x 20 feet, is set between the two wards and an exit to the covered ramps outside is made through the utility building. During the peak time of the Okinawa campaign, ward buildings handled as many as 80 casualties. Nine thousand feet of covered walk is a remarkable feature of the hospital. "Parked litters, food trays and personnel moving about, made the covered ramps necessary," Captain Fulmer declared.

Besides the ordinary buildings that are associated with an Army hospital, these services have their own facilities: the library, Red Cross, post exchange, postoffice, chapel, telephone exchange and finance office. A "detachment of patients" section is operated for patients' personnel and supply matters. At a convenient location in the center of hospital activities are the linen exchange, from whence wards draw fresh, clean linen; medical supply, and the central supply, the latter having charge of makeup of sterile packs and surgery dressings. Not included in the table of equipment for a General Hospital unit, is a closed ward in the neuro-psychiatry section, constructed with concrete floor and plywood ceiling and walls. Wherever possible, concrete floors were used more often then the TE called for, because they are easier cleaned and water pools are eliminated where insects would breed.

The patients' mess hall is a Quonset hut with dimensions of 148 by 40 feet. A kitchen wing measures 72 by 40 feet. Another wing, containing the scullery, bakery, meat shop and storage compartments, has the same area as the kitchen. Officers' and nurses' mess building is a 104 x 40 foot Quonset. The detachment

(enlisted hospital personnel) mess facilities are situated in a frame building and contains a 136 x 40 foot dining room and a 40-foot square kitchen.

Forty-five men maintain the hospital's utilities. These are a fire station, morgue, guard house, mechanical and electric shops, paint shop and a 12-unit reefer storage section.

Three laundry detachments and two laundry platoons pool efforts to provide not only the 204th with laundry services, but also another general hospital and two station hospitals on Guam. This is the first large pressing and starching laundry unit that has commenced operation in the Marianas. The laundry plant operates 16 hours a day. Due to the expansion of facilities, electric power is insufficient and only in the past two weeks has water supply been sufficient. Water supply for the plant is obtained from a 380-foot, 12-inch well, and 90,000 gallons each day are consumed. In an hour's time 800 pounds of clothes can be washed and on an eight-hour shift, 600 pieces can be pressed, according to Lieut. Herman M. Schointuch of Baltimore, Maryland, officer-in-charge at the laundry.

In the motor pool area, an ambulance platoon has 40 ambulances which have been used to move Okinawa casualties into the hospital from the docks and air ports. A movie is presented nightly in an open-air theater and USO shows provide supplementary entertainment.

In an average day, 175,000 gallons of water are consumed at the hospital—or 50 gallons per capita plus laundry usage. Two wells, each 380 feet deep with 12-inch casings, and operated by a turbine type pump, bring the water to the top of the ground, where as much as 125,000 gallons can be kept in elevated storage tanks. Units of the hospital are served by an underground distribution system. Improvised fire hydrants are located at 500-foot intervals.

Sewage disposal is accomplished by septic tanks and leeching fields. The latter is a system of underground open-jointed pipe which throws the waste into the porous coral rock.

An Army Signal Corps section operates a switchboard for the hospital and a chain of

200 telephones assures contact between the many sections of the hospital. Twelve generators set in five banks produce 550 kilowatts and keep the big hospital in electric power.

Personnel quarters (i.e., those of detachment personnel—not patient wards) and messes are sprayed with an insecticide at three-



COL. TRACY L. BRYANT, Commanding Officer

week intervals. Latrine, garbage and sewage receive frequent sprayings. Neither flies nor mosquitoes are a nuisance. Since a vigorous rat control program has been in effect, 10,000 rodents have been killed by trapping and poisoning. Following clearing of the area, weed control became an important project. Coral rock spread over the area has cut down weeds and insect propagation. As many trees as possible were left intact when the hospital site was cleared.

### MEDICAL SECTION

The 204th General Hospital was prepared to treat many types of diseases expected to arise in the Okinawa campaign. Many of these, as is commonly known now, failed to materialize, with the exception of skin diseases and psychiatric cases. The medical and surgical services are located on either side of the

central section which comprises the administrative and service portions of the big hospital unit. The medical section, whose ordinary work consists of diagnosis and treatment of diseases of adults, treated patients with jaundice, athlete's foot and dermatitis, resulting from exposure at Okinawa.



LT. COL. J. CLAUDE PROFFITT, Executive Officer

Heavy rains in the forepart of the Okinawa campaign produced a number of skin diseases, but preventive medicines kept ordinary colds and pneumonia at a minimum. Most patients with a skin disease were returned to a duty status from the hospital.

"Patients with ordinary combat fatigue were purged mentally in our medical section," said Major Gray Carter, from Greenwich, Connecticut, the 204th's chief medical officer, "and a remarkably large number were returned to duty." The serious mental cases were transferred to the zone of the interior.

The Iwo Jima campaign produced more neuro-psychiatric cases, comparatively speaking, than did the Okinawa campaign. The only treatment at Iwo was that performed by the medical aid men attached to the combat units: "Okinawa's field hospitals and air centers have done excellent work in delivering patients to Marianas hospitals for medical

treatment in the shortest possible time," the

### SURGICAL SECTION

May 20, 1945 brought the middle of the Okinawa campaign and also the peak of surgical cases for the hospital.

Casualties ordinarily evacuated from the battlefront in no more than 48 hours, were flown to hospitals on Guam and the 204th received a large number of those seriously injured. Chest wounds and fractures resulting from shell and grenade fragments were the most common types of wounds in the forepart and middle of the Okinawa campaign. The 204th used six operating rooms which functioned 18 hours each day during the Okinawa campaign as compared to the three surgical rooms that were maintained by the hospital in the Iwo Jima engagement.

"Penicillin and whole blood were available in plentious supply during the entire Ryukyuan offensive," declared Lt. Col. James A. Mayer of Mayfield, Kentucky, chief of the general hospital's surgical section. "No local blood donations were necessary due to the sufficient amount of bottled blood," he added. Whole blood, since it contains red blood cells which have oxygen in them, will ordinarily carry a patient through a serious operation.

"Every effort to sense the whole picture of a wounded man's treatment has kept the mortality rate low," the surgical chief said. "Utmost care and treatment is required not only on the operating table, but is carried right into the wards." The hospital's policy of conducting careful operations and following these through into the wards accounts for the mortality rate of seven deaths in 6,000 patients that the surgical section has treated.

As the Okinawa campaign wore on, hospital attendants could sense the end of hostilities because more of the casualties had gun-shot wounds than any other type. Mortar and artillery shell wounds were less frequent, as close-up fighting increased.

A large number of patients with minor wounds have been returned to convalescent hospitals and thence to a duty status. Some patients who would ordinarily be returned to

duty from the hospital occasionally become mental cases and treatment at the psychoneurotic wards is necessary. Other patients who sustained serious wounds are more receptive to treatment because they know the war is over for them. A 60-day hospitalization was ordinarily the practice for Okinawa casualties who would be returned to a duty status.

The surgical section has performed 800 major operations on Okinawa casualties.

Other statistics show that the X-ray section has processed 10,000 photographs of Iwo Jima and Okinawa casualties. In the month of July, chest cases that were recorded on film by X-ray numbered 978 . . . leg cases, 189. June, a peak month for the 204th, shows 3400 individual casualties X-rayed and in the same 30-day period 4256 parts were examined. There are three officers and ten enlisted men in the X-ray section.

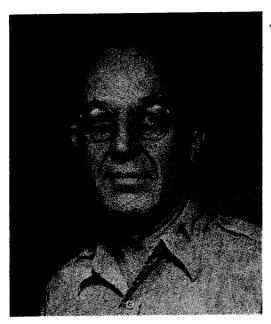
## TREATMENT OF JAW WOUNDS AND FRACTURES BY MAXILLO FACIAL SURGERY

"About 100 Okinawa battle casualties received maxillo facial surgery of all types at the 204th," says Maj. Walter Z. Rundles, of Flint, Michigan, the maxillo facial surgeon for the hospital. The main job, as he describes it, was simply to keep these patients alive through the shock stage and treat their facial wounds so that they could recover sufficiently to be evacuated to mainland hospitals. Casualties from Okinawa included men who had lost parts of the jaw or all of it, parts of the forehead, and part or all of the nose. Upper and lower jaw fractures and severe damage to delicate bones of the face were common. In six cases, patients lost both eyes. Many of the cases involved loss of one eye. A majority of the wounds were caused by mortar and rifle fire.

Working with Capt. Michael Leary, Detroit, Mich., the hospital's Oral Surgeon, Maj. Rundles splintered fractured jaws. If teeth were left in the patient's head, the lower jaw was wired to the upper. False teeth and other replacements were not produced at the hospital for these casualties because they were evacuated as soon as they were able to make the trip safely. "The plastic surgery that will re-

store their faces is a job for mainland hospitals many months from now," the major said. "Some of the patients we handled probably can expect two years of hospitalization before they are discharged."

The 204th's EENT Clinic and Maxillo Facial Surgery section, he added, has never

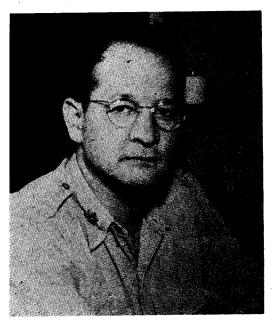


MAJOR WALTER Z. RUNDLES, Maxillo Facial Surgeon

lost a patient although some Okinawa casualties came in with their faces so badly shattered that death seemed certain. Penicillin and Sulfa drugs were a major factor in treating such patients. The average patient received 20,000 units of penicillin every three hours, including nights, amounting to 160,000 units per day. For a patient suffering loss of a jaw, a constant danger was strangulation if his tongue slipped down his throat. Such patients required constant care and watching. The jawless soldier breathed through a tracheotomy tube inserted in his throat. He was fed milk by a Levine tube through his nose. Another danger is mucus forming in the throat of the patient. To prevent it, suction machines are used, similar in principle to the device used by dentists to keep the patient's mouth dry during dental treatment. The 204th Hospital has 12 portable suction machines. Maj. Rundles says it was remarkable how quickly these patients learned to help themselves with the tracheotomy tube, the Levine tube, and the suction machine.

### NEUROPSYCHIATRY

Three ward units are maintained by the 204th General Hospital for the treatment of nervous and psychiatric cases. "Although the



Lt. Col. Samuel A. Weiss, Chief of Neuropsychiatry Service

majority of cases result from battle fatigue, there is a close comparison to ordinary mental breakdowns in civilian life," said Capt. L. B. Crain, of Houston, Texas, one of the section's three psychiatrists. Facilities are available in the wards and adjacent grounds for game participation by the patients. In a craft shop located in one of the wards, the mentally depressed patients, express their feelings in paintings and carvings. These are studied by the psychiatrists and beneficial treatment can be administered. Hospital attendants find that all patients recover more rapidly if their time is kept occupied. In the psychiatry wards, nurses encourage the patients to participate in projects of simple nature.

The neuropsychiatry section consists of three commissioned psychiatrists, one enlisted clinical and one enlisted social psychiatrist. Fifteen enlisted men serve the wards and seven Army nurses supervise the unit's activities. Three ward attendants did the same types of work in civilian life.

Only a few of the serious cases have to be tube-fed. Restraining devices are used only as a last resort in any instance. Turnover of patients is rapid. Those that do not respond to treatment at the general hospital so that they can be returned to duty are evacuated to mental hospitals in the United States.

One of the three ward units is a locked ward with facilities to frustrate suicide. Hypnosis has been used to great advantage by the section to induce the patient to recall previous situations thereby expediting treatment,

### PHYSIOTHERAPY TREATMENT AT 204TH FOR OKINAWA BATTLE CASUALTIES

The main work of the 204th's Physiotherapy Section came after the rush of Okinawa battle casualties, says 1st Lt. Helen L. Hamilton, San Francisco, Calif., head technician.

That work was the use of "whirlpools" and other equipment to limber up muscles and soften scar tissues, bringing back complete muscular range of motion. Actually, says Lieutenant Hamilton, much of the vital physiotherapy for surgical cases will be done in Stateside hospitals; but the treatments given patients at the 204th before they are evacuated assure them a speedier recovery.

Physiotherapy equipment at the 204th includes eight whirlpools—four for arm and four for leg treatments. (The whirlpool is a machine for agitating water to provide a light underwater massage, using hot water.) After gunshot wounds have healed, whirlpool treatments make it possible for the patient to stretch his wounded arm or leg. After fractures have been removed from casts, the whirlpool limbers up parts. Whirlpool treatment of burns keeps tissues soft, and is followed by applications of cocoa butter.

Ultra-violet lamps, of which the 204th has three, are used to clear up infections. Ultraviolet treatments also are given to all traction cases who have been hospitalized for an extended time. They promote appetite, give the patient a healthy coat of tan over his hospital pallor, and produce vitamin D within the body. Twelve "bakers" or "heat cradles" are used for blast concussions and nerve injuries, usually incurred by men who were blown or blasted out of foxholes. Equipment for exercises vital in physiotherapy treatment include pulleys, weights, bicycles, shoulder wheels, wrist exercisers. The ward has 16 full length tables and eight arm tables at which patients receive treatment. As a rule, these tables were filled throughout the day during handling of Okinawa casualties.

In May, Physiotherapy at the 204th gave 9,000 treatments to almost 400 patients. In June, 11,500 treatments were given to 600 patients. In July, 11,000 treatments were charted for over 600 patients.

The nature of the work makes it imperative to have responsible nurses or corpsmen attending patients at all times. For example, hot water in the whirlpools must be at different temperatures for different cases—healing of scars, burns, nerves, etc.

The Okinawa campaign, filling the 204th with surgical patients, caused an emergency reassignment of nurses to surgery wherever possible. This affected the Physiotherapy schedule, as it did other sections.

### Role of 204th Hospital Nurses in Handling Okinawa Battle Casualties

"In three months," said the 204th's Chief Nurse, Major Beulah Schloemer, West Bend, Wis., "our nurses didn't have a single day off. They were worked from morning to night with few let-ups. Yet they didn't complain. It actually was difficult to get them to go off duty when they knew their services were needed."

The 204th has about 160 duty nurses now; during the Okinawa campaign it had 190, with an additional 62 loaned from other hospitals. These nurses worked, as a rule, from 12 to 14 hours daily, sometimes even longer. Approximately two thirds of them were used in the Surgical section, with nurses in the medical wards being held to a minimum.

One handicap to efficient functioning was the removal of the 204th detachment from their former tent area to the present newlybuilt hospital just when the Okinawa battle was developing in fury. The detachment moved into the new area on May 1, one month after D-Day. No Okinawa casualties had been handled in the old tent area. Before they had sufficient time to get organized, the casualties



MAJOR BEULAH SCHLOEMER, Chief Nurse

began to pour in. On May 4, the number of patients jumped from 381 to 562, marking the beginning of the Okinawa rush. The peak was reached on June 24 when they had over 2300 patients. By July 26 this had dropped gradually to 2100.

Still another difficulty for nurses, doctors, corpsmen and patients alike was the lack of air conditioning equipment in the operating rooms. Equipment was on hand, but precious time couldn't be spared to install it, for operating rooms would have had to be closed down at the time they were needed most.

Many of the 204th's nurses have been overseas 39 or 40 months. About 10 per cent are married, and the majority are nurses who are in the Army for the emergency. Ten are regular Army nurses. Average age of the 204th nurses is 30 years. Miss Schloemer is a regular Army nurse who entered the Corps in 1937 and has been overseas since March, 1942, stationed on Hawaii, T.H. until she came to Guam in December, 1944.

#### DIETITIAN

The preparation and serving of food constitutes an important job at the 204th General Hospital. The ordinary troop ration, Expeditionary Forces Menu #1, plus a hospital supplement, is the food that patients are served when chow-call rolls around. The hospital supplement consists of soups, meats and special diets.

First Lieutenant Florence R. Nelson from Golden, Colo., is head dietitian and has three assistants. All have been overseas since April, 1942. Fresh meats and vegetables have been available for patients who were casualties in the Okinawa campaign. These were frozen foods and came from the United States. The 204th has an issue of 150 quarts of fresh milk for these same patients. The milk came from dairy cows imported to Guam early this year. Patients receive ice cream four times each week. Pastries and hot-breads are served once each day. For bed-patients, "drink-water" carts carry food to the wards. The dining room serves 550 ambulant patients at one sitting. It is a 148 x 40 foot Quonset hut.

Patients with infected jaws, diarrhea and dysentery require special diets. The hospital provides 50 special diets. Lieutenant Nelson pointed out the difficulty in the preparation of a diet for patients with diabetes, ulcers and wired jaws. The latter have to be tube-fed. "The regular Army issue of salty and spiced foods does not provide satisfactory components for many of the required hospital diets," she explained.

"Wounded men arriving at the hospital ten hours after they were wounded at Okinawa had ravenous appetites," the head dietitian said. Even though permitted to eat their fill, few patients suffered ill consequences.

Cooks in the patients' mess are regular enlisted food handlers. Few had civilian experience. Three culinary artists prepare special diets for bed patients. Under the supervision of the dietitians, cooks experiment on protein diets which will counteract malnutrition. Adequate refrigeration space was available for the Okinawa campaign. The main kitchen has 30 field ranges—the bakery, eight. Navy SeaBees improvised a steam table from several 50-gallon drums. This is used for cafeteris serving. Steam is supplied from the surgical operating building. The patients' mess uses a dishwashing machine, an electric potato peeler and meat cutter.

#### CHAPLAIN

"Boys returning from combat are very good about coming to church services," said one of the three Army chaplains at the 204th General Hospital, Capt. Robert L. Curry of St. Paul's School, Concord, N.M. "They come in wheel chairs, on crutches and some were helped by buddies."

Chaplains at the general hospital held 25 services each week during the time the hospital received casualties from Okinawa. Besides the daily Protestant and Catholic services and frequent Jewish services, occasional vespers and forums were conducted. Office consultations, ward services and letter writing made a full day's work for the hospital's chaplains and their enlisted personnel. Letter writing is done by the chaplains with regard to the funeral arrangements and grave descriptions of casualties who have not responded to treatment at the hospital. The hospital's patient chapel seats 240 persons.

### RED CROSS

To accommodate the large number of casualties from the Okinawa campaign, Red Cross facilities at the 204th General Hospital were re-staffed from four to eight workers.

"One of our biggest jobs was that of writing letters for the wounded men," said Miss Fay Munger, senior recreation worker from Tulare, Calif. In one three week's period 575 letters were written by the Red Cross workers.

A remarkable section available to patients is the craft shop in the Red Cross pre-fab, "Leather and metal articles are made and this type of work helps to pass many hours for the patients," the senior worker declared.

Besides escorting numerous USO enter-

tainers through the wards, the workers hold birthday parties in the wards with such treats as ice cream, cokes and cookies. Each night one ward has a movie. Bingo games are conducted frequently. Radios furnished by the Red Cross rotate among the wards and requests for songs are filled by the local radio station on Guam. Fulfilling its responsibilities as a social service agency, the Red Cross section at this General Hospital checks on the necessity of emergency furloughs for the Army patients. Practically an unending job is that of finding friends for patients of the hospitals.

### TUBERCULOSIS IN GERMAN PRISON CAMPS\*†

BY COLONEL ESMOND R. LONG, Medical Corps, U.S. Army

A HIGH incidence of tuberculosis was discovered in military and civilian prisoners of allied and other European nations, who were liberated by the United States Army in Western Germany shortly before the end of the war in Europe. The prevalence was so great as to suggest a grave spread of tuberculosis as a result of the conditions of imprisonment.

A precise determination of the incidence of the disease in prisoner camps is impossible, however, because of the manner in which the ill became concentrated. When the Germans retreated they took able-bodied military prisoners with them, leaving behind hospitalized prisoners and various other non-effectives. Repeatedly, whole hospitals with large numbers of sick Russian, Polish, Jugoslav and Italian former soldiers fell to the care of our Army. A high percentage of these hospitalized prisoners proved to be tuberculous.

### AMERICAN HOSPITALS DESIGNATED

In the early phase of operations in Western Germany, before more lasting arrangements could be established, the Chief Surgeon of the European Theatre of Operations designated several American general hospitals to take care of recovered allied military prisoners. Almost all general hospitals in the theatre, however, ultimately received a few of these

\* Scanty Records Prevent Accurate Count but Toll, Apparently Heavy—Disease Spread Fostered by Overcrowding and Malnutrition—American General Hospitals Cited for Excellent Care.

†Published simultaneously in the Bulletin of the National Tuberculosis Association and the U. S. Army Medical Bulletin, October, 1945. recovered prisoners, as a result of the exigencies of rapid evacuation from frontline hospitals. One large general hospital was ultimately devoted almost entirely to their care.

The treatment given, while temporary, pending repatriation of the recovered prisoners to their own countries, was excellent. An important part of it was educational, with the aim of indoctrination on the danger of dissemination of the disease. It is a gratifying fact that no comparable incidence of tuberculosis was discovered in recovered American prisoners of war.

### CIVILIAN PRISONERS

The incidence of tuberculosis in the concentration camps, which housed civilian prisoners was also very high. At the notorious Buchenwald camp, for example, near Weimar, Germany, large numbers of tuberculous patients were found under treatment at the time of the camp's liberation.

A medical service, operated by prisoner physicians, had been established long before the liberation, and, after the camp was freed, this organization was much improved under United States military supervision. General case-finding facilities were highly limited, however, and all physicians agreed that unrecognized cases abounded in the camp.

### CONDITIONS FAVOR DISEASE

The conditions of existence in these camps were favorable, in every way, to the development and spread of tuberculosis. The combination of crowding, malnutrition and harsh treatment furnished an ideal medium